



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE PATENT APPLICATION OF

HAMADA

Appln. No.: 09/663,340

Filed: September 15, 2000

Title: POWER SEMICONDUCTOR DEVICE AND PRODUCTION METHOD FOR THE  
SAME

Confirmation No.: 1868

Group Art Unit: 2826

Examiner: Mondt, Johannes

#191D

And

7/12/03

June 19, 2003

\* \* \* \* \*

AMENDMENT UNDER 37 C.F.R. § 1.116

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TECHNOLOGY CENTER 2800

JUN 23 2003

RECEIVED

Sir:

In response to the final Office Action dated December 19, 2002, please enter the following amendments and remarks:

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A semiconductor device comprising:
- a body region of a first conductivity type formed in a semiconductor substrate and having a major surface opposite to a surface shared between the semiconductor substrate and the body region;
  - a plurality of trench gates extending through the body region;
  - a plurality of first semiconductor regions of a second conductivity type that is different from the first conductivity type, the first semiconductor regions having a first depth as measured from said major surface of the body region, at least a portion of the first semiconductor regions flanking the trench gates on both of their sides and being in contact with said trench gates via films bordering and insulating the trench gates; and
  - a plurality of second semiconductor regions of the second conductivity type having a second depth as measured from said major surface of the body region that is less than the first

Inventor(s): HAMADA

Appln. No.: 09

663,340

Series Code ↑

Serial No. ↑

Filed: September 15, 2000

Mail Stop Non-Fee Amendment

Hon. Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

Sir:

**REPLY/AMENDMENT/LETTER**

Date: June 19, 2003

This is a reply/amendment/letter in the above-identified application and includes the herewith attachment of same date and subject which is incorporated hereinto by reference and the signature below is treated as the signature to the attachment in absence of a signature thereto.

**FEE REQUIREMENTS FOR CLAIMS AS AMENDED**

## 1. Small Entity claim

A. ☒ NOT madeB. ☐ WithdrawnC. ☐ made herewithD. ☐ made previously

For B & C  
See **Required  
Separate Paper**  
(Pat-256)

Claims remaining after amendment	Highest number previously paid for	Present Extra	Large/Small Entity	Additional Fee	Fee Code Lg/Sm
2. Total Effective Claims	16	**minus 20	0	x \$18/\$9 = + \$0	103/203
3. Independent Claims	2	***minus 3	0	x \$84/\$42 = + \$0	102/202
4. If amendment enters proper multiple dependent claim(s) into this application for first time (leave blank if this is a reissue application) ..... add				+ \$280/\$140 = + \$0	104/204
5. Original due Date: March 19, 2003		<input type="checkbox"/> NONE			
6. Petition is hereby made to extend the original due date to cover the date this response is filed for which the requisite fee is attached		(1 mo) \$110/\$55 = (2 mos) \$410/\$205 = (3 mos) \$930/\$465 = (4 mos) \$1,450/\$725 = (5 mos) \$1,970/\$985 =	+ \$930		115/215 116/216 117/217 118/218 128/228
7. Enter any previous extension fee paid since above original due date and subtract			- \$0		
8. Extension Fee				+ \$930	
9. If Terminal Disclaimer attached, add Rule 20(d) official fee .....			+ \$110/\$55	+ \$0	148/248
10. If IDS attached requires Official Fee under Rule 97 (c), ..... add			+ \$180	+ \$0	126
or if Rule 97(d) Request ..... add			+ \$180		126
11. After-Final Request Fee per rules 129(a) and 17(r) .....			+ \$750/370	+ \$0	146/246
12. No. of additional inventions for examination per Rule 129(b).....			x \$750/375 ea	+ \$0	149/249
13. Request for Continued Examination (RCE) .....			+ \$750/375	+ \$0	1179/1279
14. Petition fee for .....				+ \$0	

**TOTAL FEE = \$930**

15.

16. \*If the entry in this space is less than entry in next space, the "Present Extra" result is "0".

17. \*\*If the "Highest number previously paid for" in this space is less than 20, write "20" in this space.

18. \*\*\*If the "Highest number previously paid for" in this space is less than 3, write "3" in this space.

**PLEASE CHARGE  
OUR DEP. ACCT**

06/20/2003 GWORDOF1 00000023 033975 09663340

Our Deposit Account No. 03-3975)

(Our Order No. 020847 0271420

C#

M#

01 FC:1253

930.00 DA

**CHARGE STATEMENT:** The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficiencies only) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above, for which purpose a duplicate copy of this sheet is attached.

This **CHARGE STATEMENT** does not authorize charge of the **issue fee** until/unless an issue fee transmittal sheet is filed.

Query: Is appeal deadline now? If so, file Notice of Appeals separately.

Pillsbury Winthrop LLP

Intellectual Property Group

By Atty: Paul T. Bowen

Sig:



Reg. No. 38009

P.O. Box 10500

McLean, VA 22102

Tel: (703) 905-2000

Fax: (703) 905-2500

Tel: (703) 905-2020

Atty/Sec: PTB/ASW

**NOTE: File this cover sheet in duplicate with PTO receipt (PAT-103A) and attachments**